

IN THE CLAIMS

Claim 1. (Currently Amended) A glass funnel for a cathode ray tube, ~~which includes~~ comprising:

a body portion having an open end formed in a substantially rectangular shape[[,]];

a neck portion for housing an electron gun[[,]];

~~and~~ a yoke portion connecting ~~between~~ the body portion and the neck portion,

~~wherein the yoke portion can have~~ being configured to have a deflection unit mounted on an outer side ~~for deflecting~~ configured to deflect electron beams irradiated from the electron gun[[,]]; and

~~and further including~~ an outwardly projecting bent portion provided along at least a part of an outer peripheral area[[,]] where the body portion intersects with a plane perpendicular to a bulb axis[[,]] that ~~and which~~ includes intersecting points between the outer peripheral area and a plane containing a diagonal axis and the bulb axis, wherein ~~and that~~ the bent portion is positioned so as to satisfy $L/D \leq 1/2$, where L is ~~wherein~~ a distance ~~between~~ from a boundary between the body portion and the yoke portion[[,]] ~~and to~~ the bent portion, and D is a distance ~~between~~ from the boundary between the body portion and the yoke portion[[,]] ~~and to~~ the open end ~~are L and D~~ in terms of components in a relevant diagonal direction[[,]] ~~respectively~~, on the plane containing the relevant diagonal axis and the bulb axis.

Claim 2. (Currently Amended) The glass funnel according to ~~Claim~~ claim 1, wherein a total length of the projecting bent portion along the outer peripheral area ~~was~~ is not less than 1/4 of a length of the outer peripheral area.

Claim 3. (Currently Amended) The glass funnel according to ~~Claim~~ claim 1, wherein ~~that a projected portion of the projecting bent portion comprises a projected portion, and that the projected portion has a height of 5 to 50 mm on a plane containing a diagonal axis and the bulb axis.~~

Claim 4. (Currently Amended) The glass funnel according to ~~Claim~~ claim 1, wherein ~~that a stepped portion of the projecting bent portion comprises a stepped portion, and that the stepped portion has a height of 5 to 50 mm on a plane containing a diagonal axis and the bulb axis.~~

Claim 5. (Currently Amended) A cathode ray tube ~~using~~ having a glass funnel for a cathode ray tube, the tube comprising:

~~which includes~~ a body portion having an open end formed in a substantially rectangular shape[[,]];

a neck portion for housing an electron gun[[,]]; ~~and~~

a yoke portion connecting ~~between~~ the body portion and the neck portion, ~~wherein the yoke portion can have~~ being configured to have a deflection unit mounted on an outer side ~~for deflecting~~ configured to deflect electron beams irradiated from the electron gun[[,]]; and

~~and further including~~ an outwardly projecting bent portion provided along at least a part of an outer peripheral area[[,]] where the body portion intersects with a plane perpendicular to a bulb axis[[,]] ~~and which that~~ includes intersecting points between the outer peripheral area and a plane containing a diagonal axis and the bulb axis, wherein ~~and that~~ the bent portion is positioned so as to satisfy $L/D \leq 1/2$, ~~wherein where~~ L is a distance between from a boundary between the body portion and the yoke portion[[,]] ~~and to~~ the bent portion, and D is a distance between from the boundary between the body portion and the yoke

portion~~[[,]]~~ ~~and to~~ the open end ~~are L and D~~ in terms of components in a relevant diagonal direction, ~~respectively~~, on the plane containing the relevant diagonal axis and the bulb axis.

Claim 6 (New) The glass funnel according to claim 1, wherein the projecting bent portion and surrounding portions of the projected portion have substantially equal thicknesses.

Claim 7 (New) The glass funnel according to claim 1, wherein the projecting bent portion is provided over the entire outer peripheral area and the projecting bent portion and surrounding portions of the projected portion have substantially equal thicknesses.

Claim 8 (New) The glass funnel according to claim 1, wherein a projection of the projecting bent portion has a hollow space.

Claim 9 (New) The glass funnel according to claim 1, wherein the projecting bent portion is substantially semicircular in shape.

Claim 10 (New) The glass funnel according to claim 3, wherein the height ranges between 10 and 30 mm.

Claim 11 (New) The glass funnel according to claim 4, wherein the height ranges between 10 and 40 mm.

Claim 12 (New) The glass funnel according to claim 11, wherein the height ranges between 10 and 30 mm.

Claim 13 (New) The glass funnel according to claim 1, wherein a maximum tensile stress in the yoke portion ranges from approximately 6 to 8 MPa.

Claim 14 (New) The glass tube according to claim 5, wherein a total length of the projecting bent portion along the outer peripheral area is not less than 1/4 of a length of the outer peripheral area.

Claim 15 (New) The glass tube according to claim 5, wherein a projected portion of the projecting bent portion has a height of 5 to 50 mm on a plane containing a diagonal axis and the bulb axis.

Claim 16 (New) The glass tube according to claim 5, wherein a stepped portion of the projecting bent portion has a height of 5 to 50 mm on a plane containing a diagonal axis and the bulb axis.

Claim 17 (New) The glass tube according to claim 5, wherein the projecting bent portion and surrounding portions of the projected portion have substantially equal thicknesses.

Claim 18 (New) The glass tube according to claim 5, wherein the projecting bent portion is provided over the entire outer peripheral area and the projecting bent portion and surrounding portions of the projected portion have substantially equal thicknesses.

Application No. 10/824,514
Reply to Office Action of October 29, 2004

Claim 19 (New) The glass tube according to claim 5, wherein a projection of the projecting bent portion has a hollow space.

Claim 20 (New) The glass tube according to claim 5, wherein the projecting bent portion is substantially semicircular in shape.

Claim 21 (New) The glass tube according to claim 15, wherein the height ranges between 10 and 30 mm.

Claim 22 (New) The glass tube according to claim 16, wherein the height ranges between 10 and 40 mm.

Claim 23 (New) The glass tube according to claim 22, wherein the height ranges between 10 and 30 mm.

Claim 24 (New) The glass tube according to claim 5, wherein a maximum tensile stress in the yoke portion ranges from approximately 6 to 8 MPa.